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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,013	12/21/2004	Alberto Lodolo	KAR 007	7643
39232	7590	06/12/2006	EXAMINER	
Serafini Associates 7660 FAY AVE. STE H378 LA JOLLA, CA 92037			JACYNA, J CASIMER	
			ART UNIT	PAPER NUMBER
			3751	
DATE MAILED: 06/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,013

Applicant(s)

LODOLO, ALBERTO

Examiner

J. Casimer Jacyna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 10, 13, 15, 18, 19, 21, 22, 24, 26, 27 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumsey (4,214,604) in view of White, Jr.

(3,631,882). Rumsey discloses a diaphragm valve including circular entry ports 15, an arched flow section and valve seat 35, a clamping flange 23, a bonnet 24, an elliptical valve seat as shown at 45, 47 in figure 5, a diaphragm 20, a means for compressing 30, with the inlet and outlet sleeves having an elongated shape at 38 as shown in figure 4, with the sealing edge of the diaphragm being elliptical as shown at 19 in figure 5 substantially as claimed but does not disclose a concave, convex dome for the diaphragm. However, White teaches another diaphragm valve having a convex, concave dome 40, 42 for diaphragm 30 for the purpose of reinforcing and extending the life of the diaphragm. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve of Rumsey with a concave, convex dome as, for example, taught by White in order to reinforce and extend the life of the diaphragm.

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rumsey (4,214,604) in view of White, Jr. (3,631,882) as applied to claim 1 above and further in view of Walton et al. Rumsey discloses a diaphragm valve substantially as claimed but does not disclose a measuring device. However, Walton teaches another diaphragm valve having a measuring device 186 for the purpose of indicating the rate of flow through the valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve of Rumsey with a measuring device as, for example, taught by Walton in order to indicate the rate of flow through the valve.

5. Claims 1-21 and 23- 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frenkel (6,095,484) in view of Rumsey (4,214,604) and Boteler (3,310,280). Frenkel discloses a diaphragm valve including circular entry ports marked INLET, OUTLET in figure 5, an arched flow section and valve seat 5, a clamping flange 18, 20, a bonnet 19, concave, convex dome for the dome diaphragm 9 as shown in figure 7, ribs (see claims 3-9) 8, 9, 11, 12, which ribs perform the function of a spring (see claim 25), a means for compressing 21, clamping teeth and tabs (see claims 11-14) 6, 10 and a measuring device 22 (see claim 41) substantially as claimed but does not disclose an elliptical valve seat with diaphragm sealing edge, nor any shape for the inlet and outlet sleeves. However, Rumsey and Boteler teach other diaphragm valves and show that it is generally well known in the art for diaphragm valves to include inlet and outlet sleeves having an elongated shape at 38 as shown in figure 4 of Rumsey, and at 12 in figures 3 and 4 and 34 in figure 2 of Boteler, with the sealing edge and the seat of the diaphragm being generally elliptical as shown at 19, 39, 45, 47 in figure 5 of Rumsey and at 10 and 30 in figures 3 and 4 of Boteler for the purpose of matching fluid flow and diaphragm flexing requirements desired by the user and because it is generally well known in the art that the flow conduits and diaphragms in diaphragm valves may take various art recognized equivalent shapes such as circular, flattened oval or elliptical and these various shapes will work equally well in any particular valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve of Frenkel with inlet and outlet sleeves having an elongated shape and with the sealing edge and the seat of the diaphragm being

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generally elliptical as, for example, taught by Rumsey and Boteler in order to matching fluid flow and diaphragm flexing requirements desired by the user and because it is generally well known in the art that the flow conduits and diaphragms in diaphragm valves may take various art recognized equivalent shapes and these various shapes will work equally well in any particular valve.


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the PTO-892 teach other diaphragm valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Casimer Jacyna whose telephone number is 571-272-4889. The examiner can normally be reached on Wed. thru Fri. 9AM-7PM, Mon. 7AM-1PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


J. Casimer Jacyna
Primary Examiner
Art Unit 3751

JCJ